Herbal Glossary and Herbal Actions for the Herbal Medicine Making Course

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Angelica (Angelica archangelica)

Angelica

(*Angelica archangelica* and other species, Apiaceae) — root

Angelica has been used as a spice, food, and medicine for over ten centuries in Europe—the stout stems are candied, and the seeds and roots are used to flavor various liqueurs, spirits, and elixirs. Angelica is an ingredient in Chartreuse and various incarnations of gin and vermouth. It is used as a digestive aid in many forms, including bitters, liqueurs, and the candied stems. The root and seeds help to allay intestinal gas and spasms caused by infection, indigestion, or chronic digestive conditions, such as irritable bowel syndrome. Additionally, as an aromatic bitter, angelica can be chewed on, or ingested in moderation, as a digestive stimulant.

The root is used internally as a tonic anti-inflammatory for arthritic conditions. It is typically combined with other anti-inflammatory medicinals such as willow (*Salix* spp.), meadowsweet (*Filipendula ulmaria*) and turmeric (*Curcuma longa*). Angelica honey and syrup help with coughs and colds, especially damp productive coughs (not dry hacking coughs). The root can be used in formulas to treat stagnant or "cold" menstrual cramps—the kind that are relieved by heat or digestive movement. Angelica can also stimulate sluggish menses if the flow is scanty or tardy.

Anise hyssop (Agastache foeniculum)

Anise Hyssop

(*Agastache foeniculum*, Lamiaceae) flowering herb

Anise hyssop is one of my all-time favorite iced herbal teas; its flavor hints at licorice,

mint, and fennel. In fact, it is sometimes called licorice mint. Native people of the North American prairie favor anise hyssop as a beverage tea and culinary and medicinal herb. The leaves and flowers are used medicinally to treat headaches, intestinal gas, coughs, colds, and flu. It is safe for children and elders and in the same league as chamomile (*Matricaria recutita*) and mint (*Mentha* spp.) (little side effects and generally safe for most folks). Children have an affinity for the sweet flavor of this herb! I like to combine anise hyssop with sassafras (*Sassafras albidum*) and black birch (*Betula lenta*) to make root beer-flavored tea and mead.

Arnica (Arnica chamissonis)

Arnica

(*Arnica chamissonis* and other Arnica species, Asteraceae) — flowers, leaves, and roots

Arnica is used to alleviate arthritic conditions and heal injuries such as sprains, muscle strains, bruising, and bone breaks. Most arnica preparations sold in the store are homeopathic; arnica prepared as an infused herbal oil is a very different medicine. Herbal arnica works as a rubefacient, which means it brings more blood flow to an injured or inflamed area through creating mild irritation. This irritation acts to flush out inflammatory compounds and stagnant, painful swelling. The flowers and roots are the strongest portions; the leaves are useful but not as potent as other parts. Topically, herbal arnica is quite safe, although the infused oil (herbal, not homeopathic) should not be used on broken skin (cuts, abrasions, bruises with scrapes), as it can be very irritating. Additionally, a small subset of the population experiences allergic reactions to arnica topically; discontinue use if you develop a rash or prolonged itchiness and swelling. Do not use full-strength herbal arnica internally unless you are an experienced herbalist (homeopathic arnica is safe internally).

Astragalus (Astragalus propinquus)

Astragalus

(*Astragalus propinquus*, syn. *Astragalus membranaceus*, Fabaceae) — root

Astragalus is one of the most popular Chinese herbs in the West, prized for its pleasant sweet flavor and deep, nourishing medicine. The roots are traditionally added to soup stocks, imparting a mild beany flavor and gentle tonic healing qualities—safe for children and elders alike.

Astragalus has become quite popular in Western herbal medicine over the past two decades,

primarily for its adaptogenic and tonic immune qualities. It is used as a daily remedy to build immune strength, rather than as an acute remedy to fight infection. In Chinese medicine, astragalus augments, or supports, the *wei qi*, which can be likened to a protective sphere, shielding the body from harmful external influences, including pathogens. Scientific studies have demonstrated that astragalus regulates white blood cell division and activity—specifically, it has repeatedly demonstrated the stimulation of natural killer cells (NK cells) and can induce interferon production (an antiviral agent produced by the body). Additionally, astragalus balances helper T cell activity.[1] Its immune qualities are slow and sustained, with full benefits reached after weeks of daily ingestion. Because astragalus is a food herb, it is safe to take relatively large amounts regularly.

Basil

(*Ocimum basilicum*, Lamiaceae) — leaves

This familiar herb is best known for its culinary uses, but it is also a versatile medicinal. Basil possesses some of the same qualities as its cousin, holy basil (*Ocimum tenuiflorum*). Both herbs are used to lift the spirits and alleviate anxiety. Garden basil is enlivening, helping to allay fatigue and mental fog. It is a gentle circulatory stimulant and a traditional remedy for improving memory and concentration. It pairs well with rosemary (*Rosmarinus officinalis*) and gotu kola (*Centella asiatica*) in this capacity. Basil is an excellent aid to digestion, and is helpful in reducing gas and nausea. Warm tea, prepared from ginger (*Zingiber officinale*), catnip (*Nepeta cataria*), and basil, with a touch of added lemon juice, makes an excellent remedy for steadying queasiness due to motion sickness, illness, or side effects from chemotherapy. The spicier varieties of basil, with clove undertones, are more antimicrobial, heating, and helpful for reducing respiratory congestion.

Lime basil (*Ocimum* × *citriodorum*) is a citrusy

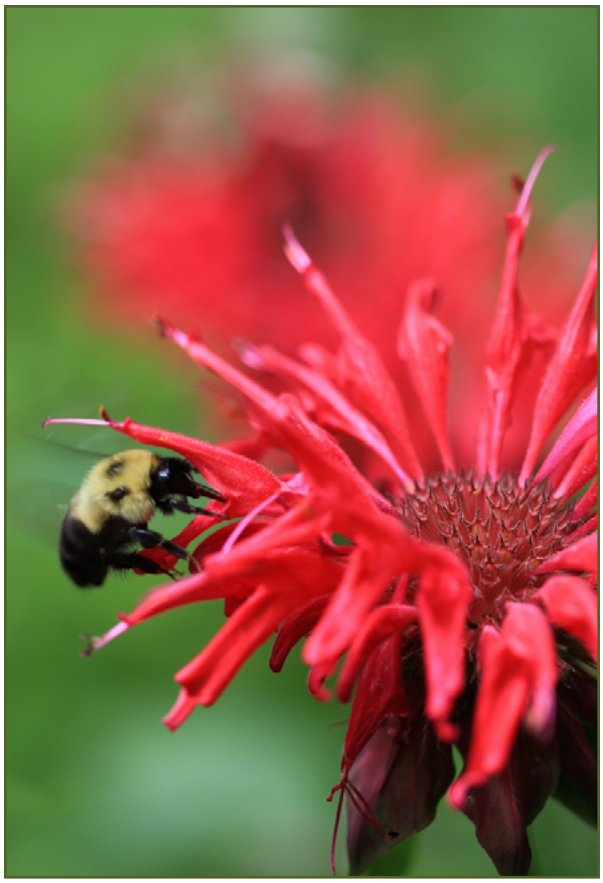
Basil (Ocimum basilicum)

variety of garden basil and my favorite basil to grow and cook with. Genovese basil is one of the most common types of basil grown, especially for pesto. Tulsi, also called holy basil (*Ocimum tenuiflorum*), is a kissing cousin to these other basils, with similar medicinal uses. It is easily grown at home if you want the fresh herb, and the dried tea can be purchased most anywhere herbs are sold.

Bee Balm, Monarda, Wild Bergamot

(*Monarda* spp., Lamiaceae)
herb (leaves, stem, and flowers)

There are over twenty species in the *Monarda* genus, all of which are native to North America. It is important to use scientific names with this group, as common names are many and often used interchangeably. The variable species might be called wild bergamot, bee balm, Oswego tea, or horsemint, depending on where you live and whom you are talking with. The name *wild*



Bee balm (Monarda didyma)

bergamot is especially confusing, as bergamot is also applied to the essential oil from the similarly scented *Citrus bergamia* (which grows in Bergamo, Italy). It is this citrus oil, and not *Monarda*, which is used to flavor Earl Grey tea. This group of plants is beloved to many a gardener, and accordingly, countless cultivars have been bred, with a wide palette of floral colors and varying statures.

The bee balms and bergamot are some of the most important medicines of Native American peoples. The leaves are a traditional culinary herb and used medicinally to treat infections and digestive issues such as gas and bloating. Many Native tribes also used various *Monarda* species to treat fevers, colds, coughs, flu, and respiratory congestion of the lungs and sinuses. Wild bergamot is useful in colds and flu, as it is antimicrobial, anticatarrhal, and diaphoretic (brings on a sweat to break a fever). I like to use the dried leaves and flowers in a steam inhalation to help break up phlegm in respiratory congestion. Wild bergamot has a pungent, spicy aroma and flavor and can be enjoyed in tea or prepared as a tincture.

All *Monarda* species have edible flowers, which can be used as a garnish or tossed in salads for an extra splash of color. Just remember to pull the individual flowers from their fibrous flower heads. Monarda flowers tend to be surprisingly spicy, and add a bright pungency to savory dishes. The leaves of all *Monarda* species can be mixed with basil to create a pungent twist on the classic pesto. I find that wild bergamot (*Monarda fistulosa*) has the nicest flavor for pesto, but bee balm (*Monarda didyma*) is a close runner-up. Other species, such as horsemint (*Monarda punctata*), will be too intense for pesto, unless it is heavily diluted with basil or lemon balm. The spicier bee balms can best be enjoyed sparingly, as a limited spice in a blend with milder herbs.

Many species grow wild throughout North America and are also common garden herbs or bedding plants. Until you are very familiar with the group, however, we don't recommend harvesting plants from the wild in the early spring, as the group can be challenging to identify without the flowers present. Instead, harvest the shoots from gardens where the identity is certain.

Burdock

(*Arctium lappa* and *A. minus*, Asteraceae) — root

Burdock is a large biennial native to Eurasia, naturalized throughout North America. Its impressive leaves can grow to massive proportions with their wavy margins and long white hairs on the underside. Burdock's purple flowers give rise to their infamous "burrs"—seed heads that cling stupendously well to clothing, animal fur, and hair.

Burdock root is a classic blood cleanser and tonic for the skin and liver, with a long tradition of medicinal use in both Europe and China. It is a classic food herb—the root can be pickled and enjoyed as a daily condiment, or roasted with other root vegetables. The Japanese relish the

Burdock (Arctium minus)

long taproot and cultivate it in special wooden boxes, which make harvesting easier. *Gobo*, the Japanese name for this vegetable, is finely sliced and added to stir-fries, soups, and sushi, lending an earthy sweet flavor. Fresh burdock root can be found in the produce section of health food stores or Asian markets. Any time an herb is used as food, we know that we have a bit of flexibility with dosage, and it will be generally safe to use as a tonic.

The root is high in *inulin*, a type of polysaccharide that plants produce for carbohydrate storage. Inulin feeds beneficial intestinal flora and is therefore *prebiotic*, a term used for plants or compounds with the ability to nourish the healthy bacteria dwelling in our intestines. Inulin is water soluble and is best assimilated as a tea or in the form of food. Alcohol is not a good solvent for inulin, and although burdock tincture may be beneficial for other reasons, it will lack the prebiotic qualities.

Burdock is often combined with red clover (*Trifolium pratense*), dandelion (*Taraxacum officinale*), and yellow dock (*Rumex crispus* and *R. obtusifolius*) in formulas for skin conditions such as eczema, psoriasis, dandruff, and acne. Topically, burdock root is applied as a poultice or wash for eczema and psoriasis. It is a mild bitter; taken internally, it gently stimulates the appetite and increases digestive secretions and motility, while supporting healthy populations of intestinal flora. Burdock is used tonically to treat arthritic conditions such as gout, osteoarthritis, and rheumatoid arthritis. Its antirheumatic qualities likely stem from its ability to support the kidneys, as well as its diuretic and alterative qualities.

Identification: Burdock's gargantuan heart-shaped leaves are distinctive, and can reach massive proportions for a temperate world plant. The underside of the leaves has pronounced venation and white wooly hairs. The edges of the leaves are often wavy but not toothed. The impressive leaf stalk (petiole) is grooved, like celery, and can be tinted purple. During its first year, it only produces basal leaves, and in its second year, it sends up a flowering stalk, which eventually bears pinkish-purple thistle-like flower heads. Its seeds

Burdock (Arctium minus)

have burrs and readily cling to seed dispersers, which includes unwitting humans and their animal companions.

Harvesting: Harvest the root at any of the following times: the end of the first year, during the winter between the first and second year, or in the spring of the second year. It can be challenging to dig the entirety of the root. I recommend using a posthole digger or digging fork. One strategy is to dig down beside the root and extricate it from the hole. Wash the root and store refrigerated for up to two weeks. If preparing for tea, chop and dry immediately.

Calendula (Calendula officinalis)

Calendula

(*Calendula officinalis*, Asteraceae) — flowers

Calendula is one of the easiest-to-grow medicinal herbs and so versatile in its healing properties that it invariably finds its way into the hearts and gardens of all herb lovers. It has been used medicinally, both internally and externally, for centuries to heal wounds, burns, and rashes. The sunshiny flowers have also been used traditionally to support the immune system and lift the spirits.

The whole flowers can be dried, and added to soups and stews in the winter as an immune tonic. This traditional folk way of imbibing calendula heralds from medieval Europe, where the flowers were also added to bread, syrups, and conserves. Nicholas Culpeper, author of the classic *Culpeper's Complete Herbal* in 1653, wrote, "The flowers, either green or dried, are much used in possets, broths, and drink, as a comforter of the heart and spirits, and to expel any malignant or pestilential quality which might annoy them."

Another account, written in 1699, states, "The yellow leaves of the flowers are dried and kept throughout Dutchland against winter to put into broths, physicall potions and for divers[e] other purposes, in such quantity that in some Grocers or Spicesellers are to be found barrels filled with them and retailed by the penny or less, insomuch that no broths are well made without dried Marigold [Calendula]."

Calendula flowers are used topically as a vulnerary, an antimicrobial, and an anti-inflammatory. Take care that you are using the whole dried flowers, as the medicinal resinous oils are found mostly in the involucres (green base of the flower head). Sometimes calendula is sold as "petals" only; this is a weaker medicine for topical use. Calendula is used to speed the healing of rashes, burns, wounds, eczema, insect bites, chaffing, and bruises. It is a common remedy for diaper rash and to heal sore, cracked nipples from nursing (it is safe for babies to ingest in small amounts).

The cheery flower has many other internal uses. It is a wonderful digestive ally. Calendula tea is commonly used to help ease peptic ulcers, GERD (gastroesophageal reflux disease), and inflammatory bowel disease. Calendula helps heal gastric and intestinal inflammation from infection or irritation through its vulnerary, anti-inflammatory, and antimicrobial actions.

Calendula is one of my personal favorite winter-time teas, as I find it uplifting, especially when I am feeling the long-dark-night-blahs. Most modern herbalists don't use it as one of their primary anti-depressant herbs, but its use in this capacity has a strong historical precedence. Calendula may be called upon for grief and sadness, along with other cheering flowers: rose (*Rosa* spp.), mimosa (*Albizia julibrissin*), and lavender (*Lavandula angustifolia*). In addition, consider other helpful herbal companions, such as lemon balm and lemon verbena. *Visit my article on growing and enjoying calendula in the kitchen and medicine cabinet.*

Chaga (Inonotus obliquus)

Chaga

(*Inonotus obliquus*, Hymenochaetaceae) sclerotium

This beloved medicine has a curious appearance, resembling a mass of burnt wood—or a burl covered in charcoal. Chaga grows almost exclusively on birch trees (*Betula* spp.), and can be found in the northern forests of Europe, Asia, and North America. It is a parasitic fungi whose preferred host is birch. The part we use medicinally is not the fruiting body but actually a mass of mycelium, called a *sclerotium*. Chaga has been a central folk medicine in Russia and Siberia since the 1500s. The Khanty people of Siberia have used it as a near panacea, for tuberculosis, digestive issues, intestinal parasites, liver disease, and heart failure. They also used it as a disinfectant and for ritual cleansing.

In the past decade, chaga has become quite popular in the United States as an immune tonic and antioxidant remedy. The flavor of the tea is quite pleasant; many people liken it to the flavor of coffee. We like to prepare chaga chai with traditional chai spices throughout the winter to help keep colds and flu at bay. Please see the recipe for Herbal Immune Chai in Module 2, which includes chaga.

Chamomile (Matricaria recutita)

Chamomile, German

(*Matricaria recutita*, Asteraceae; syn. *Matricaria chamomilla*) — flowers

One of the most beloved herbs all around the globe, chamomile is widely enjoyed as an everyday tea and household remedy. Chamomile is well known for its gentle sedative effects; it's one of the safest nervine remedies for children, elders, and individuals with a sensitive constitution. The tea or tincture can be used for insomnia, stress, and anxiety. It's also a wonderful digestive herb, being a mild bitter, as well as a carminative (alleviating gas) and anti-spasmodic for the gastrointestinal tract. The tea can be sipped on to relieve

indigestion, irritable bowel syndrome, and intestinal gas. Roman chamomile (*Chamaemelum nobile*) can be employed in the same manner as German chamomile.

Chamomile is very popular in Mexico; its Spanish name is *manzanilla*, meaning "little apple," referring to the apple-like scent of the herb. There is a delightful tradition in Mexico involving newborn babies. A dilute tea is prepared from chamomile flowers and used as the water for the infant's very first bath. My daughter's first bath was in warm chamomile tea, which was very soothing and aromatic for both of us.

This versatile herb continues on as a premier ally for the growing child. When nursing mothers drink the tea, it passes into the breast milk, aiding colic, restlessness, and irritability in breastfeeding infants. Chamomile eases the pain of teething, and can be administered through the breast milk or as tea, diluted with breast milk. It can be combined with other gentle pain-relieving herbs such as lemon balm (*Melissa officinalis*) and catnip (*Nepeta cataria*) to make a tea—soak a clean washcloth in this tea and freeze it. After frozen, the washcloth can be thawed out a bit and given to a teething infant to chew on. The combination of the cold washcloth and herbs is quite soothing, along with being anti-inflammatory and analgesic.

Chamomile is antimicrobial when applied topically. Moistened tea bags can be used as an easy and effective compress for conjunctivitis. Chamomile tea can be used as a wash for diaper rash and vaginitis in infants and young girls. It can also be employed as a sitz bath for this purpose. To prepare a sitz bath, pour a concentrated tea into an appropriately sized basin for the individual. The person submerges the area to be treated in the basin for ten or fifteen minutes.

Cautions: Despite a relatively high safety profile for most of the population, the topical use of chamomile can cause irritation in sensitive individuals, especially with those who have known allergies to pollen from plants in the Aster family, like mugwort (*Artemisia vulgaris*). For sensitive people, it can also cause problems internally—this type of reaction is very rare but can be quite serious. Avoid chamomile internally if a person has had any reactions to the herb topically or internally, as increased sensitivity can develop.

Chickweed (Stellaria media)

Chickweed

(*Stellaria media*, Caryophyllaceae)
herb (leaves, stem, and flowers)

This common weed is beloved among wild foods enthusiasts for its succulent mild flavor, which lends itself nicely to salad and pesto and as a garnish. It is also a gentle medicinal, safe for babies and elders alike.

Chickweed is cooling, soothing, and anti-inflammatory, both inside of the body and outside. It is used topically in salves, herbal oils, poultices, and compresses. Internally, it can be used as a tea or in capsules. Some of chickweed's nutritive qualities are wasted in tincture, as the alcohol doesn't effectively extract minerals or mucilage; for this reason I generally don't recommend chickweed tincture. It is considered

a blood cleanser and tonic, strengthening herb, especially after a long convalescence. Chickweed's high levels of iron make it a powerful ally in iron-deficiency anemia; it can be ingested liberally as a food or in tea to help build blood.

Chickweed (Stellaria media)

Identification: Chickweed is a low-growing annual, which bears smooth paired leaves (botanically, we call this "opposite leaves") with no teeth. The leaves are generally as big as a pinky nail, but given enough nitrogen and moisture, they can grow much larger. Chickweed hugs the soil, clambering over rocks or neighboring plants. Its stem is green or reddish, and never woody, as it is an annual. The flowers grow in small clusters and resemble diminutive white stars. They only have five petals but often appear to have ten, as each petal is so deeply cleft.

Chickweed also has a unique identification clue: hold a bit of chickweed up to sunlight and you will see a single line of white hairs traveling up the stem. You may need to twirl the stem a bit to see this characteristic. Notice how the hairs travel in a straight line along the stem, in between the leaves. Look closer, and you will see that the line switches positions on the stem at the leaf juncture, giving the hairs a spiraling or candy-cane-like appearance. It sounds more confusing than it really is. Go have a look at a chickweed stem, if possible, and it will become crystal clear. This line of hairs is unusual, but there are a few other plants bearing this trait. It is imperative to combine all of the above characteristics for proper identification.

Look-Alikes: Chickweed's close relative, the mouse-ear chickweed (*Cerastium fontanum*, Caryophyllaceae) is quite similar in appearance, grows in similar habitats, and can be found throughout North America. Mouse-ear chickweed is hairier and coarser than chickweed; it is also edible, although not as tasty. They can readily be told apart by the fact that mouse-ear chickweed has stems that are completely covered in hairs.

Chickweed is often found growing alongside the nonedible Persian speedwell (*Veronica persica*, Plantaginaceae), and many people confuse the two. Speedwell has blue flowers with four petals, coarsely toothed leaves, and stems that lack the single line of hairs. Persian speedwell is not edible, to my knowledge. Another look-alike is scarlet pimpernel (*Anagallis arvensis*, Myrsinaceae), which has peach-colored flowers and also lacks the telltale single line of hairs. It is essential to properly identify any plant before you harvest it for food or medicine. If in doubt, do not harvest!

Habitat: Chickweed can be found in gardens, in old manure and compost piles, on sidewalks, and along trails. It grows in full sun or part shade, depending on the season and bioregion. Chickweed is native to temperate Eurasia and is accustomed to cool, moist weather; it shies away from the full summer sun in hotter climates. In milder regions, chickweed can be found all throughout the winter or in very early spring. Here in the southern Appalachians, chickweed makes two major appearances: early spring and fall. Take care to harvest only if you are sure nobody has sprayed herbicide. It is also important to avoid gathering plants near roads and railroads, as the surrounding soil is typically contaminated with lead and other toxins. If you live in a place where you aren't able to access clean wild plants, consider visiting a local organic urban farm or community garden, where you are likely to find an abundance of chickweed, along with gardeners who are happy to share the bounty.

Harvesting: I harvest chickweed with scissors, cutting back the top few tender inches, which will generally include some leaves, flowers, flower buds, and stem, all of which are edible and tasty. After receiving a "haircut," the plant will grow tender new shoots, making it possible to repeatedly harvest until it gets too leggy and chewy. Try not to cut below the top few inches, as these lower portions are quite fibrous—eating them will force your jaws into working overtime and leave you feeling like a cow. Look for densely growing patches of chickweed; the neighboring stems hold each other up, making the "haircut" harvesting method much easier and quicker than harvesting lone plants, which have a more splayed, low-growing habit.

Preparing: Once in the kitchen, the greens can be rinsed and chopped coarsely— stems, leaves, and flowers alike. Chickweed is tasty enough to use as a salad base, or it can be added to lettuce with other wild greens such as violet (*Viola* spp.) and dandelion (*Taraxacum officinale*). I use the chopped greens in lieu of lettuce on sandwiches and wraps. One of my all-time favorite ways to enjoy its tender, tasty leaves is in pesto. Simply substitute chickweed for basil in your favorite pesto recipe. Because chickweed's flavor is so mild, it makes an excellent base for more pungent or bitter greens, such as garlic mustard (*Alliaria petiolata*) and dandelion greens. You can steam or sauté chickweed, but I generally enjoy it raw as it cooks down substantially.

Chickweed is easy to digest and high in vitamins and minerals, and thus is traditionally prepared as a first food after a long illness or stomach flu. It also has a reputation as a diet herb, and many people swear by it as an ally in weight loss. It is typically eaten or prepared as a tea for this purpose, although some people have reported good results with the tincture. To my knowledge, no studies have been performed on chickweed for this use. It is a diuretic, and perhaps it works by optimizing cellular metabolism. In any case, the fiber is a welcome addition to most Americans' diets. Like all leafy greens, chickweed bulks up a meal, while adding very little calories. According to John Kallas of the Institute for the Study of Edible Wild Plants, chickweed is higher in iron and zinc than any of the commonly cultivated greens, such as spinach, collards, and kale.[2]

If you have chickweed growing in your garden, consider letting it sprawl between planted crops as a living edible mulch or groundcover. I encourage its growth between rows of greens, tomatoes, or peppers. Using this method, chickweed yields an edible and medicinal harvest in the early spring. As the season progresses, the chickweed becomes less productive as the vegetable crops fill out and are harvested.

Comfrey (Symphytum officinale)

Comfrey

(*Symphytum officinale*, Boraginaceae)
root and leaves

Comfrey root is one of the best herbs for promoting healing of damaged tissue. It can be used on bruises, breaks, cuts, sores, and sprains. The leaf is also medicinal, but the root is much higher in allantoin (a primary constituent that promotes tissue growth) and mucilage. Comfrey has many contraindications when used internally due to the presence of harmful pyrrolizidine alkaloids (PAs), which can cause permanent damage to the liver. See the *Herbs to Avoid in Pregnancy and Lactation* PDF to learn more about PAs. These contraindications do not apply to topical use. Comfrey root is such a potent wound healer that it shouldn't be used on puncture wounds or deep cuts, as it can seal off the wound by promoting skin regrowth on the upper layers, leaving the inside layer vulnerable to infection (compromised tissue in an anaerobic environment).

Dandelion (Taraxacum officinale)

Dandelion

(*Taraxacum officinale*, Asteraceae)
root and leaves

Dandelion is an all-around medicinal powerhouse. Its root, brewed in tea, is used to support the liver, encourage populations of healthy intestinal flora, and stimulate digestive processes through its bitter flavor. The roots can also be roasted and made into a hearty coffee-like beverage. Its edible flowers are lovely in salads and can be made into wine, jelly, and fritters. I generally pull the free yellow parts (florets) of the flower head from the tough green base. These florets can be sprinkled on salads or added as a garnish. The leaves are also edible and medicinal; they are used in tea and tincture form as a potassium-sparing diuretic and digestive bitter.

Dandelion is one of our most familiar plants, but it does have some look-alikes. So much so, that there are a few plants called false dandelion. Indeed, before it flowers, dandelion closely resembles other Aster family members, especially chicory (*Cichorium intybus*). I recommend only harvesting dandelion when it's in flower until you get to know it really well.

Here are a few tips for identifying dandelion:

- The flowering stalks are hollow, leafless and exude a white "milk" when cut.
- The stalks are often tinged reddish and are topped by a single yellow flower head.
- The leaves are only found in a basal rosette (clustering of leaves, emerging from a central point on the ground); there are no leaves originating from the flower stem.
- The leaves are jagged-edged with large pointy lobes and smaller teeth.
- The central vein, or midrib, is pronounced and whitish, protruding on the underside of the leaf.
- The leaf also exudes the characteristic white milk (technically called *latex*).

Daylily (Hemerocallis fulva)

Daylily

(*Hemerocallis fulva*, Xanthorrhoeaceae)

The daylily is more than just a beautiful garden flower; it is a versatile wild edible and perennial vegetable. Native to Asia, it has long ago escaped from the confines of cultivation over most of eastern North America and is a familiar sight along streams, roadsides, and fences. You may already be living close to a patch of this showy

wild food. The tender green shoots, tubers, petals, and floral buds are edible. However, it's important to note that a small percentage of people—perhaps one out of fifty—react with transient gastric distress when eating daylily, especially raw. I recommend starting out with a small amount of cooked flowers or shoots and then eating slightly larger portions incrementally, if no gastric upset is observed. Following this protocol, any serious allergic reactions should be avoided. Also be aware that daylily resembles many poisonous species. The shoots are especially tricky to identify and easy to confuse with many nonedible or poisonous species such as iris (*Iris* spp.) or daffodils (*Narcissus* spp.).

Hemerocallis fulva, the scientific name of the daylily, translates from Greek into "beautiful day": *Kallos* = beautiful and *Hemera* = day. The common name is derived from the fact that daylily flowers open for only one day. On any given day throughout its flowering season, you can observe the plump buds, the yellow-orange flowers-of-the-day, and the wilted remnants of yesterday's blooms. Cultivated in Asia for millennia, the dried flower buds are sold as "golden needles" and are an important ingredient in many traditional soups.

The flower petals may be pulled from the green base, and added to salads or employed as a gorgeous garnish to any dish. They can also be added to a stir-fry just before serving, which retains their color but softens their texture. The plump buds lend themselves nicely to soups and scrambles as well. The petals can be dried thoroughly and sealed in an airtight container for re-hydrating in soups or casseroles during the winter months. Dried and fresh blooms add a sunny dash of beta-carotene and vitamin C to any meal. There are many ornamental cultivars of daylily, with variously colored blooms. I recommend eating only the common yellow-orange variety. The other varieties may indeed be edible, but since I haven't been able to find anything definitive on the subject of their edibility, I stick to the common garden variety.

Daylily (Hemerocallis fulva)

Identification: Daylily has six yellow-orange *tepals*—botanically, these are undifferentiated petals and sepals. The tepals are strap shaped and form an open funnel. They do not bend back in a little curlicue (as in various *Lilium* species). On any flowering stalk, there will be the inflated buds in varying sizes, a few opened flowers, and the wilted flowers of yesterday. The leaves are long and linear shaped, almost grass-like, and are folded at their base. If you dig up a daylily plant, it has little tubers. Note that nonedible look-alikes have bulbs, like daffodils (*Narcissus* spp.), or lateral rhizomes, like iris (*Iris* spp.), for example.

Daylily is sometimes called tiger lily, which is quite confusing, as there are a handful of true lilies, including *Lilium superbum*, *L. catesbaei*, *L. henryi, L. lancifolium,* and additional *Lilium* species, which are also called tiger lily. These true lilies have petals that are recurved (bent backward toward their base) into a curlicue, have dangling stamens, and typically bear whorled leaves. Some of these tiger lily species have edible flowers, but the other parts of the plant are not edible in the same way as daylily (*Hemerocallis fulva*). Basically, they aren't the same plant and can't be used the same way! Please see the lesson on edible flowers in Module 2 for photos of daylily look-alikes.

Echinacea (Echinacea purpurea)

Echinacea, or Purple Coneflower

(*Echinacea purpurea* or *E. angustifolia*, Asteraceae) — root and seed

Purple coneflower (*Echinacea purpurea*) is frequently cultivated as an ornamental and is the easiest species of Echinacea to grow. It attracts butterflies, moths, bees, and other insects into the garden. The roots, seeds, and fresh flowers are medicinal, and can be made into a tingly tasting, immune-stimulating tea or tincture. I use Echinacea as a short-term remedy for warding off colds and flu, particularly when a person has been exposed to infection or feels the initial stages of sickness. Some prime-time indications for Echinacea include flying on a plane, visiting with a sick friend or co-worker, or having someone sick in the home. Echinacea can also shorten the duration of an infectious illness. Many people stop taking it once they are sick, thinking it can't help anymore, but Echinacea stimulates many aspects of our immune system to help us fight the infection quicker.

Elderberry

(*Sambucus nigra*, Adoxaceae) flower and fruit

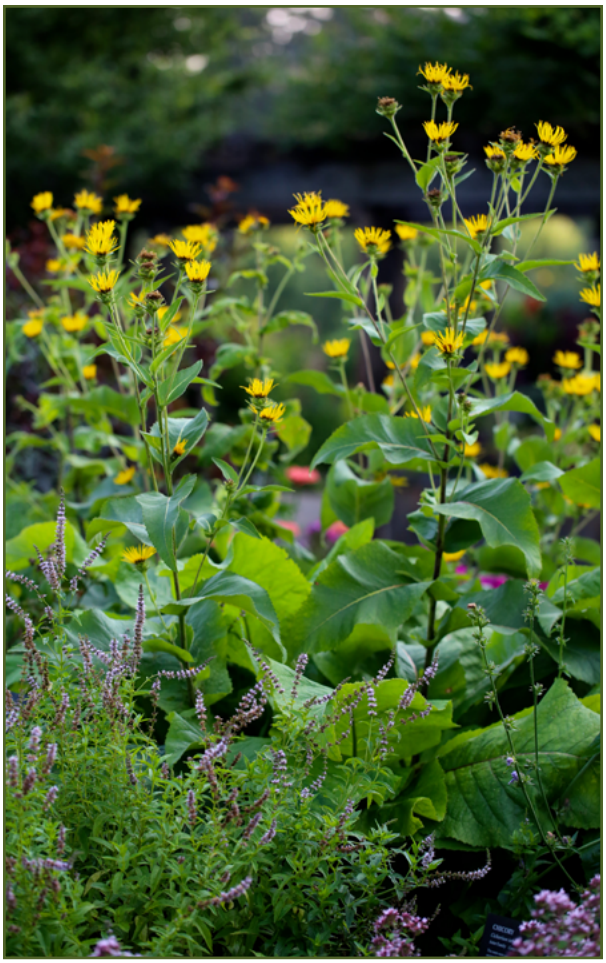
The clustered ebony-purple berries of this large shrub are both edible and medicinal. Elderberries are prepared into wine, jam, infused honey, tea, syrup, and mead (honey wine). The syrup has become quite popular recently as a remedy for flus, but elderberry has been used medicinally for centuries in Europe and North America for a

Elder flowers (Sambucus nigra var. canadensis)

wide variety of ailments. The fruit is a tonic food and medicine for arthritic complaints. Additionally, elderberries are helpful in colds (as well as the flu) due to their antiviral, diaphoretic (helps break fevers), and anticatarrhal (decongestant) qualities.

The flowers are also edible and medicinal, and make a tasty tea, cordial, or liquor. Elder's creamy blooms are used as a diaphoretic and as a helpful remedy for sinus congestion from head colds, allergies, or sinus infection. The wee flowers can be plucked from the stem and added to pancake batter, scones, or banana bread. Topically, they are used as an anti-inflammatory in natural body care products and as an eyewash for conjunctivitis.

Elderberry (Sambucus nigra)



Elecampane (Inula helenium)

Elecampane

(*Inula helenium*, Asteraceae) — root

Elecampane's impressive roots are a fine mélange of spicy and sweet, and have figured prominently in folk medicine for centuries as a digestive and respiratory remedy. It is a warming circulatory stimulant and is especially helpful as a tonic for folks who run cold, particularly if they are prone to excess mucus in the respiratory tract. The roots are bitter, with a peck of sweetness and spice, making it a highly useful remedy for indigestion and poor assimilation. Additionally, elecampane helps dispel excess intestinal gas, adding another layer to its digestive benedictions.

The roots are a stimulating expectorant, helpful for expelling thick, heavy mucus from the recesses of the lungs. Elecampane is also antibacterial, adding another angle of assistance in overcoming bacterial respiratory infections. It has been used traditionally to treat bronchitis, tuberculosis, pneumonia, and asthma. Furthermore, its digestive qualities assist in the queasiness caused by inadvertent ingestion of mucus, common with children during respiratory congestion. The infused honey or syrup is quite tasty, and will be dutifully imbibed by most people, including picky and uppity wee folk. The honey deepens in flavor as it ages—I have an elecampane honey that is over a decade old and still incredibly delectable and medicinal.

Garlic (Allium sativum)

Garlic

(*Allium sativum*, Amaryllidaceae) — bulb

This beloved spice has been used medicinally for at least five thousand years. It is a potent antimicrobial and cardiovascular tonic. Many studies confirm garlic's traditional use as a tonic for the circulatory system, as it lowers blood pressure and inhibits platelet aggregation by thinning the blood. It has demonstrated the ability to lessen atherosclerosis (hardening of the arteries from

plaque build up). Additionally, garlic can be highly effective in preventing infections such as the common cold and flu. Note: garlic can aggravate heartburn and gas, especially if ingested raw or in large quantities. Coating garlic with olive oil can help minimize these side effects.

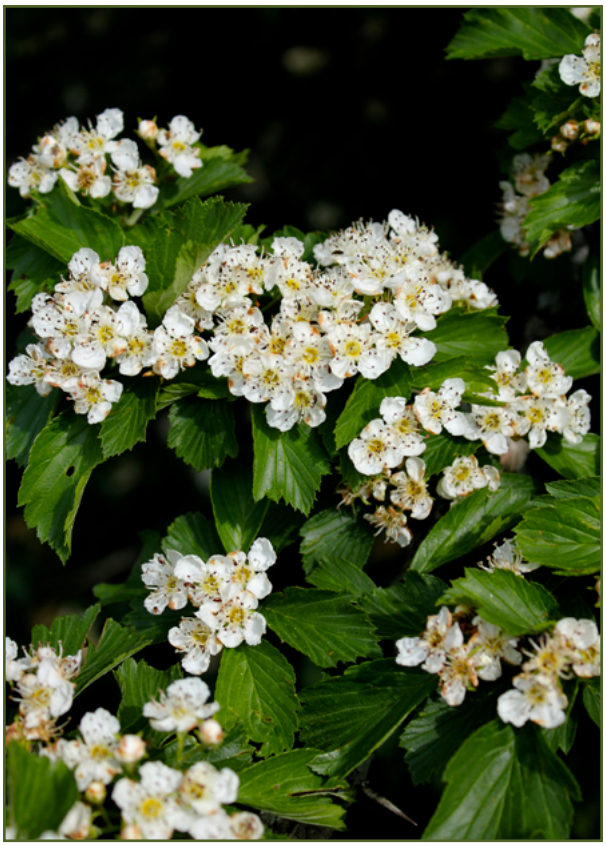
Ginger (Zingiber officinale)

Ginger

(*Zingiber officinale*, Zingiberaceae)
rhizome (sold as root)

This familiar warming spice is also a versatile medicinal. The rhizome is used in tea or tincture form to increase circulation, alleviate arthritis, and allay nausea. It can be used to reduce motion sickness and nausea from pregnancy or chemotherapy. Ginger has other digestive uses as well—it is a great aid in reducing gas and inflammation in the intestines. It is also a premier circulatory stimulant, making it an ally for people who run cold or have poor blood flow to their extremities.

Precautions: Ginger is heating and can aggravate heartburn. It may be too stimulating in high doses for folks who run hot.



Hawthorne (Crataegus sp.)

Hawthorn

(*Crataegus* spp., Rosaceae) — flowers or fruit

Hawthorns are small thorny trees in the rose family, which bear fruits resembling wee apples. It is estimated that there are anywhere between 150 to 1,000 species in the hawthorn genus. The reason for such a wide discrepancy in the species count is due to hawthorn's proclivity for interspecies relations, resulting in confusing hybrids and murky species delineation. Most botanists do not bother keying out, or identifying, hawthorn to species, due to rampant hybridization. Thankfully, proper species identification is not necessary, as all hawthorn berries are edible and medicinal, with a long history of use in Europe, North America, and Asia. The berries have been eaten everywhere it grows, and it has been a staple famine food, seeing many peoples over lean winters.

The Chinese have used their local hawthorn species as a heart remedy, with recorded uses dating back to the seventh century. Western

herbalists use hawthorn as a remedy for hypertension, atherosclerosis, congestive heart failure, and angina pectoris. There is ample literature on hawthorn's use as a cardiotonic, with its wide variety of flavonoids present in the fruit, flowers, and leaves. The flowers and berries are also used for more energetic heart maladies, including grief and loss. I prefer to use the flowers in these situations, as they carry lightness and hope. Hawthorn is a food herb and thus can be ingested in a wider variety of mediums than most herbs. Tea and tincture are classics, but people also use the fruit to make honey, jam, syrup, cordials, elixirs, and vinegar. Hawthorn-infused honey is a beautiful rose color and quite fruity and pleasant.

Most of the traditional recorded use of hawthorn by Native Americans centers on its use as a digestive tonic for various gastrointestinal maladies, such as diarrhea, dysentery, and bloating. The bark and branchlets are more astringent (puckery) than the flowers and fruit and thus have been used to slow diarrhea and excessive menstrual bleeding. The thorns were employed as a lancing tool for boils, and the Okanagan would place a thorn into an arthritic area and ignite the distal end, letting the thorn burn down to the embedded point. This painful remedy would apparently cause a scab to form but clear the afflicted area from arthritic achiness.

The folklore around hawthorn's magic is especially rich in Europe, with admonishments not to cut the tree, except during the springtime—the trunk is used for a maypole in Beltane dances and the flowering branches employed as adornment for home and maiden alike. The trees are associated with fairies and seen as a portal to the otherworld. Hawthorn branches have been placed over thresholds as protection from malevolent energies in Europe. The Iroquois used a decoction as a protection against the personal physical manifestations of witchcraft.

Hawthorn trees can often be found in young woods, hedges, and cow fields. Look for the thorns and little red fruits. The leaves are variable, but are often wedge shaped, with teeth and straight veins. Some hawthorns have slightly lobed leaves. The small trees are often planted as ornamentals for their showy flowers and fruit, along with a stature suited for small urban spaces. It goes without saying (so why I am writing this?!) that you should be 100% positive of your identification before you harvest the fruit. Ask your local botanist, herbalist, extension agent, arborist, or pagan for some identification tips.

Hibiscus (Hibiscus sabdariffa)

Hibiscus, or Roselle

(*Hibiscus sabdariffa*, Malvaceae)
calyx (typically sold as "flowers")

Brewed as a puckery red tea, hibiscus is enjoyed as a refreshing and medicinal beverage throughout the world. It is quite popular in the Caribbean and Central America as a cold herbal brew mixed with sugar; this drink is called *sorrel* in the islands and *agua de flor de Jamaica* in Mexico.

Roselle has been used traditionally as a medicinal for its diuretic, hypotensive, and anti-microbial properties. In Mexico, roselle is highly regarded as a natural liver and kidney tonic and a weight-loss herb. It is also revered for its beneficial effects on the heart, helping to lower

cholesterol levels and high blood pressure. High in antioxidant anthocyanins, hibiscus has been the focus of many recent studies for its anti-inflammatory, cardioprotective, neuroprotective, and hepatoprotective qualities. It is a good tonic tea for people with heart disease and high cholesterol, and it is a general preventive against free-radical stress in the body. In an overview of animal and human studies conducted with hibiscus tea, it was determined that hibiscus was as effective in lowering blood pressure as the blood pressure medication Captopril. These studies also demonstrated favorable effects on lipid profiles, including reduced total cholesterol, LDL-C, and triglycerides, as well as increased HDL-C.[3]

Holy basil (Ocimum tenuiflorum)

Holy Basil, or Tulsi

(*Ocimum tenuiflorum*, Lamiaceae)
herb in flower

Holy basil has long been a sacred plant in tropical India, prized for its myriad medicinal uses and calming, uplifting nature. In the past decade, it has gained herbal superstardom status in the West, as a tasty tea and panacea—the leaves and flowers are a remedy for colds, flu, sinus infections, anxiety, depression, allergies, asthma, coughs, and poor memory and concentration. The leaves are used in the kitchen as a spicier version of their affable culinary and botanical cousin, Genovese basil.

Lemon balm (Melissa officinalis)

Lemon Balm

(*Melissa officinalis*, Lamiaceae) — herb

This aromatic mint family member is a staple in the herb garden and teapot. Delightfully aromatic, lemon balm tea is delicious, especially iced. The leaves are used as a nervine for depression, anxiety, and insomnia. The tender shoots can be eaten in moderation and offer a lemony addition to salads, soups, sauces, and vinegars. The pesto of lemon balm is quite delectable. Lemon balm is safe and enjoyable for children. It is one of the first herbs many mothers turn to for helping their children unwind and sleep.

Lemongrass (Cymbopogon citratus)

Lemongrass

(*Cymbopogon citratus* and *C. flexuosus*, Poaceae)
herb

Throughout the world, lemongrass is a popular beverage tea and everyday home remedy for some of the most common health complaints:

headaches, stress, indigestion, insomnia, coughs, colds, and flu. In Brazil, the tea is a popular remedy for anxiety and insomnia. In Jamaica, lemongrass is combined with ginger to treat headaches, intestinal gas, and stress. In Ayurvedic medicine, lemongrass is used to aid digestion, relieve menstrual cramps, and expectorate phlegm. Much of the research conducted on lemongrass has centered on the essential oil, which has demonstrated marked antibacterial and antifungal properties.

Lemon verbena (Aloysia citriodora)

Lemon Verbena

(*Aloysia citriodora*, Verbenaceae) — herb

Lemon verbena tea is popular in much of the world as a gentle remedy for indigestion, stress, and insomnia. It is safe for children and elders, and in the same league as chamomile (*Matricaria chamomilla*) and mint (*Mentha* spp.) in that it rarely has side effects. The tea soothes frazzled nerves and helps instill calm after a busy day. It can be combined with catnip (*Nepeta cataria*) and chamomile as a gentle sedative for insomnia. Lemon verbena is also useful in quieting nausea and can be mixed with ginger (*Zingiber officinale*) and catnip for this purpose. It is useful for motion sickness, as well as the queasiness brought on by various infectious illnesses.

Lemon verbena is also uplifting, and is useful for conjuring sunshine during the dreariness of gray winter days, as well as during dark nights of the soul. The tea can offer immediate relief while slower-acting herbal antidepressants work their magic. Lemon verbena is simultaneously brightening and calming, and doesn't induce lethargy in most people if drunk throughout the day.

Licorice (Glycyrrhiza sp.)

Licorice, or Liquorice

(*Glycyrrhiza glabra* and *G. uralensis*, Fabaceae) root

Licorice is a beloved herb to many cultures—it has been used widely in India, China, and Europe for thousands of years. The sweet root

is taken as tea or ingested in powder form for its beneficial effect on the digestive system. Licorice is demulcent (mucilaginous) and anti-inflammatory, making it helpful for heartburn, irritable bowel syndrome, peptic ulcers, sore throat, and ulcerative colitis. Licorice is also a skeletomuscular anti-inflammatory, and is a traditional internal remedy for arthritic conditions like osteoarthritis and tendonitis. The tea is especially helpful for coughs, notably the dry hacking type. Licorice is contraindicated in pregnancy, water retention, heart conditions, and high blood pressure.

Maitake (Grifola frondosa)

Maitake, or Hen of the Woods

(*Grifola frondosa*, Meripilaceae)
fruiting body (mushroom)

This large fungus is a gray, fleshy polypore cluster, usually found growing at the base of hardwood trees. Along with being a revered medicine, maitake mushroom is enjoyed as a wild or cultivated edible mushroom—it's quite tasty and tender. Its common name, hen of the woods, comes from the fanciful resemblance to a hen's tail. Its Japanese name, *maitake*, also has some colorful roots. The word *maitake* means "dancing mushroom." The most common explanation I've found for this is that maitake was so revered as a medicine, it could be exchanged for its weight in silver (which is enough to make anyone dance). You can imagine the delight a forager might have felt when stumbling upon a veritable fortune in the forest. In fact, lore has it that maitake hunters would jealously guard the location of prized maitake hunting grounds (it regrows from the same trees or stumps year after year), only to reveal it to their children on their deathbed.

Today, maitake is widely cultivated, making it affordable to the average person. It is revered as a liver tonic and an immunomodulator. It has demonstrated anti-tumor activity and helps to lower blood sugar levels as well as blood pressure.[4] Maitake is also helpful for lowering LDL cholesterol levels. Try checking with your local mushroom growers to see if they cultivate it. Sometimes you can find the fresh mushroom for sale at specialty grocers and health food stores.

Meadowsweet (Filipendula ulmaria)

Meadowsweet

(*Filipendula ulmaria*, Rosaceae)
flowering herb

The leaves and flowers of this billowy meadow herb have a pleasant wintergreen aroma and flavor. Meadowsweet was traditionally employed

to flavor meads, hence its former name, *meadwort*. Meadowsweet is used as a tea or tincture internally for digestive issues, skeletomuscular pain, and arthritic complaints. It's especially helpful for soothing digestive inflammation, heartburn, and peptic ulcers. Most people, including finicky children, love this tasty tea. Its flavor is a fine hybrid between black tea and wintergreen, with a touch of marshmallow. It is one of my trusted remedies for heartburn, along with licorice (*Glycyrrhiza glabra* and *G. uralensis*) and calendula (*Calendula officinalis*). Meadowsweet is also used to quiet nervous indigestion. Many herbalists use meadowsweet for arthritic conditions such as osteoarthritis, rheumatoid arthritis, and tendonitis.

Stinging nettles (Urtica dioica)

Nettles, Stinging

(*Urtica dioica*, Urticaceae)
leaves (seeds and root are also used medicinally, but aren't explored in this text)

This celebrated herb is an emerald queen who proudly reigns over her realms—food and medicine—with vim and vigor. Nettle leaves are packed with vitamins, minerals, and chlorophyll; this vitality is easily infused into nutritive herbal teas, vinegars, and medicinal foods. The potential to sting disappears when nettles are dried or cooked.

Nettle leaves are a supreme blood builder and nourishing tonic (see the notes below on its nutritional profile). Because it is a food plant, it can be consumed frequently with less attention to dosages than many other herbs. With its high iron content, it is highly useful for iron-deficiency anemia. It can be consumed during pregnancy and postpartum to help with the extra nutritional demands, and it is especially helpful to rebuild iron levels after heavy bleeding during childbirth. Nettles are also used to promote the production of breast milk, especially for thin women with less nutritional reserves. The greens and tea of nettles are high in minerals, vitamins, and chlorophyll, including vitamins A and C, calcium, potassium, magnesium, and iron.

Nettles are considered one of the best herbs to take daily when feeling tired or depleted. I often recommend nettles with milky oats (*Avena sativa*) and tulsi (*Ocimum tenuiflorum*) to support people during challenging times of transition or extra workloads. Nettles can help rebuild reserves after a long or intense illness.

Identification: Stinging nettles is one of the easiest plants to identify, as it has a pretty irritating sting. But here are some additional characteristics to aid in identification:

- Opposite leaves, with coarse teeth
- Leaves that vary from shovel shaped to elongate
- Copious rough hairs on the leaves and stem
- Found growing in clumps or large patches
- Leaves and stem that sting
- Found growing in old barnyards, floodplains, and human-disturbed areas

Related Species: The wood nettle (*Laportea canadensis*, Urticaceae) is a close relative of stinging nettles. It also delivers a potent sting, albeit a milder version than *Urtica dioica*. Wood nettle grows under the forest canopy near streams in central and eastern North America and has alternate leaves, while stinging nettles (*Urtica dioica*) have opposite leaves and typically grow in fuller sun or human-inhabited areas. Wood nettle has edible leaves, but they are not used medicinally like stinging nettles' leaves.[5] There are other

Stinging nettles (Urtica dioica)

species of stinging nettles in the *Urtica* genus that can be used medicinally or as a food; consult a local wild foods expert or herbalist to learn about regional varieties. Note that a few unrelated plants (not in the nettles family) are also called nettles because of a similar stinging mechanism—these will not have the same use as *Urtica* species.

Harvesting: Nettle shoots emerge in the earliest days of spring—harvest the new growth weekly and you will be rewarded with bushier plants and tender new regrowth. If you pick nettles for food, pinch off the topmost leaves, leaving the fibrous stem behind. When harvesting for medicine, wait until the plants are knee-high and have not yet flowered. Wear thick clothing that covers arms and ankles, and use leather gardening gloves. Use a scythe or similar tool for large-scale harvesting, and use pruners for smaller yields.

You can obtain two to three harvests in one growing season. Nettles often tires in midsummer or become raggedy after ravenous caterpillars grow plump on a hearty diet of the leaves. Isn't it delightful to realize that many colorful butterflies flittering about are actually nettles-powered? Cut the plants back after the caterpillars have metamorphosed and moved on, and fall's cooler temperatures will rouse them back to life. When harvesting, take care not to crush the leaves or densely pile up the shoots, as bruised leaves oxidize into an unsavory black color. I learned this the hard way when I lived in California. After hiking over a mile to a lush, pristine nettles patch, I greedily stuffed a large duffel bag full of primo shoots. The whole harvest turned ebony instead of the vibrant malachite color I was hoping for!

Plantain (Plantago sp.)

Plantain

(*Plantago* spp., Plantaginaceae) — leaves

Plantain leaves are anti-inflammatory, demulcent, astringent, and vulnerary. Plantain is a common weed in lawns, fields, and gardens and should not be confused with the banana-like plantain fruit (*Musa* spp., Musaceae) of the tropics. Plantain is used topically on insect stings, spider bites, cuts, bruises, rashes, and burns. The leaves can typically be found throughout the year be and used as a fresh poultice when needed. You can employ any species of plantain—each will have its own personality but share similar overarching medicinal qualities.

Quaking aspen (Populus tremuloides)

Poplar, or Balm of Gilead

(*Populus* spp., Salicaceae)
springtime buds and bark

Poplar buds are the resinous early spring buds from various poplar tree species. Poplar buds are wonderfully sticky and aromatic, and are a traditional remedy for burns and arthritic conditions. Balm of Gilead, or balsam poplar (*Populus* × *gileadensis*, Salicaceae), is a traditional folk remedy of the Appalachian Mountains; the medicinal uses of the tree were so important that mountain folks simply call it the *balm tree.* Many species of poplar have medicinal buds—if they are sticky and smell of vanilla or amber, they can be employed medicinally.

This group of plants also includes cottonwood and the aspens. Along with their kissing cousins—the willows—this genus contains appreciable amounts of salicylate compounds (chemically related to aspirin). The bark of all these trees can be used internally as a bitter and skeletomuscular anti-inflammatory and analgesic (but the buds aren't necessarily resinous and therefore can't be used as substitute for Balm of Gilead). If you are sure you have a cottonwood, an aspen, or a poplar, chew on a bit of the bark to determine its medicinal strength. If it's quite bitter, then it's good medicine, as the bitter taste is a good indicator of the salicylate content.

Reishi (Ganoderma tsugae)

Reishi, Hemlock, or Varnished Artist's Conk

(*Ganoderma tsugae*, Ganodermataceae)
fruiting body (mushroom)

This brilliant, shiny red shelf mushroom grows on the wood of conifers, most commonly the hemlock tree (*Tsuga* spp.). Its white undersurface permanently darkens when rubbed with a fingernail or a sharp point. It is common to see this fungus fruiting in late spring in the southern Appalachians in eastern North America. It is also found abundantly in the Pacific Northwest. There is a lively debate among herbalists concerning this species being substituted for the classic reishi mushroom, *ling zhi* (*Ganoderma lucidum*). It is my belief, based on the traditional

use of both species, and personal experience, that they are similar medicinals, with a wide degree of overlapping usage.

Reishi and hemlock reishi can be used as a tonic to support the immune system, both for underactive immune responses and overzealous immune activity. Allergies and asthma are examples of the immune system being overactive. Another example would be autoimmunity. Many herbalists use reishi as a tonic remedy for these conditions, myself included. Reishi is a traditional Chinese tonic for the liver, heart, and lungs.[5] It is especially helpful as a daily remedy for those who have weak lungs and who frequently succumb to respiratory infections. Reishi is also a safe remedy for individuals who have hepatitis C and those with a history of alcohol abuse or exposure to environmental toxins. It is also an adaptogen, making it a supreme ally for increasing vitality, energy, and overall resilience.[6] Adaptogens are tonic herbs and fungi that help balance the body by supporting its ability to deal with physical, mental, and emotional stress. Finally, reishi is a premier remedy for anxiety; it is very balancing and grounding.

Rose

(*Rosa* spp., Rosaceae)
petals and/or buds and rosehips

Rose flowers are cooling and drying, slightly antimicrobial, and astringent. The flowers are often combined with lavender (*Lavandula angustifolia*) and hawthorn (*Crataegus* spp.) blossoms to help with grief and loss. Rose is also used topically to heal sunburns, rashes, and stings. It is a traditional remedy for stagnant female reproductive disorders, including heavy and painful menstrual cramps. The ancient associations with rose and romance speak to its use as an aphrodisiac and nurturing aid for assuaging emotional difficulties around sexuality.

The pink and red petals are high in bioflavonoids, and are antioxidant and anti-inflammatory. The petals can be added to salads, smoothies, and fruit salads. One of my favorite ways to use the

(Rosa rugosa)

blossoms is to add them to berries when making jam—this fanciful addition turns any fruit preserve into an alchemical delicacy. I call this rose-adorned jam "fairy flutter." Make sure you only use the petals from organic rose bushes, as roses are one of the most heavily sprayed plants in gardens and commercial farms alike.

You can use any rose medicinally, but I would like to feature one of my favorite species. Ramanas rose (*Rosa rugosa*, Rosaceae) is native to Asia and has spread throughout much of the world, especially coastal areas. It covers the sand dunes all along the coastline of New England. It is easy to grow and relatively pest-free, and makes enormous rosehips which are simply the fruits of roses. If ramanas rose is highly invasive in your area, I do not recommend planting it, as it can overly displace native plants. Here in the southern Appalachians, it spreads by runners a short distance, but it doesn't spread too wildly. The suckers can be controlled by mowing or weed whacking.

Rosehips are very high in bioflavonoids and vitamin C and are edible as well as medicinal. The rosehips are more astringent and sour than the flowers.

Rose of Sharon (Hibiscus syriacus)

Rose of Sharon

(*Hibiscus syriacus*, Malvaceae) — flowers

Rose of Sharon is an ornamental shrub, native to eastern Asia, that is grown throughout warmer temperate regions of the world. It has edible flowers, which are slightly mucilaginous but pleasant in flavor. The young leaves are also eaten fresh or cooked but are a tad tough for my palate. Rose of Sharon often prances about the landscape, sowing readily with overabundant seedlings. However, some of the multipetal varieties are nearly sterile and thus stay put. You can pull out the inside parts of rose of Sharon and stuff the blooms, much like daylily. It flowers later in the season and can be a good substitute for daylily in mid to late summer.

Saint John's Wort

(*Hypericum perforatum* and *H. punctatum*, Hypericaceae) — flower clusters

Saint John's flower clusters (composed of flower buds and open flowers) are employed topically to heal burns and alleviate muscular inflammation. The fresh yellow flowers turn the infused oil a beautiful crimson color. Saint John's wort is used topically for sciatica, arthritis, pulled or strained muscles, sunburn, and other burns (after the initial heat has dissipated). I often combine Saint John's wort and arnica to prepare a massage oil for sore muscles and achy joints.

St. John's Wort (Hypericum perforatum)

Sassafras

(*Sassafras albidum*, Lauraceae) — root bark

This iconic medicinal tree is in the laurel family (Lauraceae), along with other aromatic notables such as bay laurel (*Laurus nobilis*), cinnamon (*Cinnamomum* spp.), camphor (*Cinnamomum camphora*), spicebush (*Lindera benzoin*), and redbay (*Persea borbonia*). The root bark is the strongest medicinal part; it is used as a blood cleanser, a skeletal muscle anti-inflammatory, a carminative, an aromatic bitter, and a diaphoretic. It is one of my favorite winter-time beverage teas with its aromatic, warming spicy and sweet flavor. Sassafras has distinctive leaves, which vary in shape—on any given tree there will be leaves that range from unlobed to mitten-shaped and finally three-lobed. The leaves are sweetish and mucilaginous, kind of like a cross between oatmeal and a bay leaf. I like to nibble on the leaves when I'm hiking, as they are quite thirst relieving. Many Native American tribes traditionally used the leaves as

Sassafras (Sassafras albidum) growing with Japanese honeysuckle (flowering vine)

a thickening spice in soups and stews. European settlers picked up this affinity for sassafras as a spice. Today, the powdered dried leaves are an important ingredient in Creole cuisine, and are called *filé* or *gumbo filé*, which is a classic ingredient in gumbo, a spicy, thick soup or stew often served over rice.

Sassafras root was one of the first exports from North America after the arrival of the Europeans, who relished it as a novel tea and regarded it as a potent medicinal, especially for fevers and syphilis. The early colonists prepared a low-alcohol fermented root beer with a combination of sassafras, black birch (*Betula lenta*), cloves (*Syzygium aromaticum*), and sarsaparilla (likely *Aralia nudicaulis*). Many people associate the flavor of sassafras with root beer, and it remains one of the primary flavoring agents in natural root beers. Despite its longtime use as a beverage tea and medicinal tonic, there have been controversial concerns over sassafras' safety due to the high content of a certain constituent, safrole, in its roots. Safrole is the primary component in sassafras' essential oil. Many commonly ingested spices, such as black pepper, cinnamon, and basil, also contain safrole, although to a lesser extent than sassafras.

Studies have shown that when rodents are fed diets containing extremely high levels of safrole, they develop permanent liver damage due to carcinogenic action. Many experts on herbal safety feel that the concerns for sassafras' potential to cause harm for humans is overblown, considering the small amount of safrole a person ingests with an average cup of tea. It is my opinion that the tea and tincture are safe to consume in moderation, especially if part of an herbal formula (where the amount of sassafras is less than if it were used as the only ingredient). The leaves of sassafras do not contain an appreciable amount of safrole, and therefore do not carry any of the same concerns. The sassafras used to flavor herbal beverages and food in the United States is safrole-free. Do not use sassafras in pregnancy.

Schisandra

(*Schisandra chinensis*, Schisandraceae) — fruit

These garnet-colored fruits are an important traditional Chinese medicine, and are called *wu wei zi*, or "five-flavored fruit." I find the flavor of the tea to be mildly sour, with subdued smoky and salty overtones. Schisandra is an adaptogen, an antioxidant, a cardio-tonic, an immune tonic, and an anxiolytic. Traditionally it is used to increase *yin*; I often use the berries with folks who experience a lot of dryness, especially when coupled with a strong thirst and copious urine. Note that these are common symptoms of diabetes, which should always be ruled out. Traditionally schisandra was also used to help with excessive sweating, including night sweats. Schisandra is calming and uplifting for many people, and is used as a tonic in depression accompanied by anxiety, and as a remedy to increase concentration and focus. Some people who are prone to heartburn may find that schisandra aggravates this condition.

Shiitake (Lentinula edodes)

Shiitake

(*Lentinula edodes*, Marasmiaceae)
fruiting body (mushroom)

Shiitake is the second most consumed mushroom in the world, after the common button mushroom. It has been grown in China for almost one thousand years and has subsequently gained a popular following in the Western world. You can find the fresh mushrooms at health food stores, specialty grocers, and farmers markets. You can also purchase dried shiitake mushrooms and rehydrate them before preparing or add them to soup. These are some of the easiest mushrooms to cultivate at home; they are often sold in pre-inoculated kits.

Shiitake mushrooms are widely eaten and prepared as medicine for their myriad benefits, including supporting the cardiovascular and immune systems. The mushrooms are antioxidant and taken as a cancer preventive. Shiitake is a traditional tonic food-medicine in China and Japan, where it is revered for increasing stamina, improving circulation, and alleviating arthritis.

Mexican tarragon (Tagetes lucida)

Tarragon, Mexican

(*Tagetes lucida*, Asteraceae) — herb

This anise-scented perennial shrub is native to Mexico and Central America. It is used medicinally as a digestive aid and is enjoyed as a pleasant beverage tea, especially by the Mayan people in Guatemala. The leaves and flowers are used as a common household remedy for nausea, diarrhea, vomiting, and intestinal gas. Also called *pericón*, the tea has demonstrated antibacterial and antifungal activity.

The leaves are a culinary herb, lending a French tarragon-like flavor to eggs, soups, and vinegars. French tarragon (*Artemisia dracunculus* var. *sativa*) is a kissing cousin, as it's in the same family but a different genus. Mexican tarragon is actually closely related to the ornamental marigolds (*Tagetes* spp.). Both tarragon species can be used fairly interchangeably in the kitchen; Mexican tarragon is sometimes sold as a culinary herb in the United States under the name of *Texas tarragon* or *winter tarragon*. Mexican tarragon's flowers yield a lovely yellow dye. It is

easy to grow in the garden, especially in warmer climates, where it flourishes. It is cultivated as an annual herb in cooler climates and as a perennial in warmer climates (USDA zone 7b and warmer). The licorice-like flavor pairs nicely with black pepper and fruits.

Usnea (Usnea sp.)

Usnea

(*Usnea* spp., Parmeliaceae) — lichen

Usnea is an important medicinal to have on hand in the medicine cabinet. Winter is a fine time to gather usnea, as heavy winds during storms often knock down branches covered with this versatile medicinal. Lichens are symbiotic organisms, consisting of a fungus and an algae. Usnea is fairly easy to recognize, with its thin, string-like branching pattern. It can be differentiated from similar lichens by pulling one of the "strings" slowly apart and looking for a thin white strand at the core.

Usnea is especially helpful in treating respiratory congestion, as it is drying and anti-inflammatory in addition to being antimicrobial. I primarily use usnea in tincture form and combine it with immune stimulants, such as Echinacea and spilanthes, for upper and lower respiratory infections. It is also one of my treasured remedies for urinary tract infections, along with corn silk (*Zea mays*), uva-ursi (*Arctostaphylos uva-ursi*), and marshmallow root (*Althaea officinalis*). Most urinary tract infections can be successfully treated with this protocol, along with unsweetened cranberry juice. Usnea is antiviral, antibacterial, and antiprotozoan.

Usnea is more effective as a tincture rather than tea when treating infections, as its anti-microbial properties are more alcohol soluble. I tincture dried usnea with organic grain alcohol at 1:4 95%, and fresh usnea at 1:2 95%. I use a glass blender to create an usnea-alcohol slurry. The dosage is 2–3 droppers full diluted in water or tea, taken three times a day. Usnea should be used on a short-term basis and can be very drying to the sinuses.

Valerian (Valeriana officinalis)

Valerian

(*Valeriana officinalis*, Caprifoliaceae) — root

The musky roots of valerian are a much-beloved remedy for insomnia, anxiety, and pain. Valerian is best known as a sleep aid and can be combined with passionflower and skullcap to create a safe and effective hypnotic herbal blend. The aromatic roots are also used as a general

sedative and pain reliever. Anxiety, nervous tension, injury, menstrual cramps, and headaches are a few conditions ameliorated by valerian's soothing properties. Valerian is a digestive aid for intestinal gas, irritable bowel syndrome, and Crohn's disease, as it is a carminative and smooth muscle antispasmodic. Along that same vein, it also helps relax the uterus during menstrual cramps and slows spasmodic coughing.

Interestingly, valerian is stimulating for a small portion of the population—exacerbating the very symptoms one is hoping to relieve. People can feel wired, alert, and even more anxious. Unfortunately, there is no magic way to determine if someone will have a paradoxical reaction to valerian. Simply try a few droppers full of the tincture or sips of the tea in the middle of a quiet day at home and note your response.

Violet (Violoa sororia)

Violet

(*Viola* spp., Violaceae) — leaves and flowers

Violet is cooling and moistening and is used internally as a blood cleanser and lymphatic stimulant. It is taken as a tea or syrup and can also be eaten for its medicine. The exact dosage is not especially important because it can safely be consumed in large quantities. As a gentle food herb, violet is generally safe for elders, youngsters, and people who are taking pharmaceuticals.

Violet's heart-shaped leaves and characteristic irregular flowers are a familiar sight for most of us. The leaves typically bear rounded teeth and are smooth. The flowers have a little, rounded tail if you turn them over. Children seem to have a special affinity for this charismatic group of plants, perhaps because its bright flowers are well within their reach. Violets actually have many look-alikes, many of which are inedible or poisonous, so only harvest them when the flowers are present and you are 100% sure that you have a violet.

The *Viola* genus contains around 550 species, mostly found in the temperate climates of the world. Many species of violet are used similarly to the common blue violet. Most wild foods authors report that the blue- and white- flowered species of violet are all edible, but not the yellow-flowered species. Other authors write that all species are serviceable. I notice that the leaves of some of the wild violets have an unpleasant soapy flavor, which leaves a funny feeling at the back of my throat; this is most likely from high levels of saponins. I avoid these plants and instead go for the milder-tasting species. Some woodland species of violet are rare and should not be disturbed. A good course of action might be to identify the common species of violet in your area and then research their edibility and traditional uses for medicine. See the notes below on two common species that are good edibles and medicinals.

Violet has a rich tradition in Europe, where it has been used for centuries as a pulmonary remedy for dry hacking cough. It is often recommended for bronchitis and whooping cough, along with the roots of marshmallow (*Althaea officinalis*) and licorice (*Glycyrrhiza glabra*). Violet can also be used as a tonic for chronically swollen lymph

nodes. As with many other herbs with an action on the lymphatic system, it has a long tradition of use in the treatment of cancer.

I enjoy violet leaves and flowers in salad, pesto, and sandwiches and wraps. The roots of most violet species can cause nausea and vomiting, and should not be eaten. The leaves and flowers can be harvested with scissors in a "haircut" style. Violet can be harvested multiple times throughout the spring until the leaves become too fibrous for food. It often makes a comeback in the fall, with a flush of tender new growth. Violet leaves can be sautéed or steamed. I also like to stir them into soups as a nutrient-dense thickener. The flowers make a lovely garnish—try sprinkling them on salads and adding them to cakes and pancakes. Violet flowers are also beautiful when candied or frozen into ice cubes.

Violet leaves contain a good bit of mucilage, or soluble fiber, and thus are helpful in lowering cholesterol levels (similar to oatmeal). Soluble fiber is also helpful in restoring healthy populations of intestinal flora, because beneficial bacteria feed off this type of fiber. The leaves are high in vitamins A and C, and rutin, which is a glycoside of the flavonoid quercetin. Rutin has been shown in animal and in vitro studies to be antioxidant, anti-inflammatory, and blood thinning. Many foods that are high in rutin, such as buckwheat (*Fagopyrum esculentum*), are eaten traditionally as a remedy for hemorrhoids and varicose veins.

Topically, violet is used as a poultice, a compress, an infused oil, and a salve in the treatment of dry or chaffed skin, abrasions, insect bites, eczema, varicose veins, and hemorrhoids. It is cooling, soothing, and anti-inflammatory.

P.S. Did you know violet has secret subterranean flowers? *Visit my article to find out all about these intriguing blooms.*

Common blue violet (*Viola sororia*, Violaceae) is native to most of central and eastern North America, where it is indeed quite common. This charming violet is a common sight in lawns, gardens, sidewalk cracks and along trailsides. The common blue violet is typically considered a "weed" because of its relative ease in adapting to human disturbance, but it is actually native to North America. The leaves and flowers of the common blue violet are edible and medicinal. The 'confederate violet' is a cultivar (cultivated variety) of *Viola sororia*—it has white flowers with blue streaks and is a common inhabitant of lawns in the southeastern United States.

Sweet violet (*Viola odorata*, Violaceae) is the principal medicinal and culinary species used in Europe. It has escaped cultivation in many locales, as it is popularly planted for its fragrance. Much of the American use of violets stems from the European herbal tradition. Interestingly, most violet species in North America lack the signature aroma of sweet violet.

White sage (Salvia apiana)

White Sage

(*Salvia apiana*, Lamiaceae) — herb

The gray-green leaves of white sage mirror the hues of its native habitat in Southern California—coastal foothills and desert washes

and canyons. No herb comes close to approximating the intoxicating scent of this arid mint family member. White sage's medicinal uses are very similar to its Mediterranean cousin—garden sage (*Salvia officinalis*)—although the former is more anti-microbial and stimulating than its domestic brethren.

I find that a steam inhalation of the leaves helps break up respiratory congestion in both the lungs and the sinuses. Try combining thyme (*Thymus* spp.) and wild bergamot (*Monarda fistulosa*) in the steam pot with a few drops of eucalyptus (*Eucalyptus globulus*) essential oil. Native peoples of Southern California prepared the leaves as a tea to remedy coughs and colds. The aromatic leaves were used to freshen up armpits and to eliminate body odors when hunting. Sage leaves were burned after sickness to fumigate the home. Additionally, the aromatic smoke was a remedy for colds in the sweathouse.

The practice of burning white sage as an aromatic cleansing and purifying agent has been widely adapted by Westerners, to the demise of wild populations, which have been overharvested, primarily for smudge sticks. These are bundles of aromatic plants, assembled when fresh, and tied together with string and dried. The "sticks" hold their form and slowly smoke when lit on fire. The sage sticks of commerce are wild harvested, typically by folks who are economically, rather than ecologically, motivated (which is to say that gatherers may be razing hillsides because they don't have other viable income). So, grow your own, or buy your white sage from people you trust, who are tending wild populations, with an eye toward the future of the species. I like to combine white sage with black sage (*Salvia mellifera*) or red cedar (*Juniperus virginiana*) for smudge sticks. Lavender is another lovely pairing.

Yarrow (Achillea millefolium)

Yarrow

(*Achillea millefolium*, Asteraceae)
flowers and leaves

Yarrow flowers and leaves are antimicrobial, astringent, antihemorrhagic, and anti-inflammatory. Yarrow is used to help stop bleeding (fresh herb or poultice is the most effective) and tighten inflamed and boggy tissues. Yarrow helps with bruising, spider veins, hemorrhoids, and varicose veins. I prefer to use the fresh or dried leaves rather than the flowers for stopping bleeding.

Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect.

—Chief Seattle

Glossary of Herbal Action Terms

Adaptogen: A tonic that helps balance the body by supporting its ability to deal with physical, mental, and emotional stress.

Alterative: Supports the body in healthy cellular metabolism and its natural process of detoxification, cleansing, and elimination. *Also known as blood cleanser.*

Analgesic/Anodyne: Provides pain relief (either topically or internally).

Anthelmintic: Helps expel parasitic worms from the body. *Also known as vermifuge.*

Anti-anxiety: Helps lessen anxiety. *Also known as anxiolytic.*

Antibacterial: Inhibits the growth and production of bacteria.

Anticatarrhal: Supports the body to dissolve, remove, or prevent the excess formation of mucus in the respiratory passages.

Antidepressant: Lessens the frequency, occurrence, or intensity of depressive states.

Antifungal: Inhibits the excess growth and production of fungal infections.

Antihistamine: Inhibits the physiological effects of histamine in the body, most often used to lessen allergic reactions.

Anti-inflammatory: Alleviates inflammation in the body.

Antimicrobial: Inhibits the growth and production of a broad spectrum of microbes, including bacteria, fungi, viruses, and protozoans.

Antioxidant: Inhibits the production of free radicals in the body.

Anti-pyretic: Lowers or reduces a fever.

Antirheumatic: Relieves the pain and discomfort of musculoskeletal inflammation through a variety of actions.

Antispasmodic: Eases cramps or spasms in skeletal or smooth muscle tissue.

Antiviral: Inhibits the growth and production of viruses.

Aphrodisiac: Excites, nourishes, sustains, or elevates sexual or sensual desire.

Astringent: Tightens or constricts bodily tissue, namely the mucous membranes and skin.

Bitter: An herb known for its positive effect on digestive and liver function due to its bitter taste.

Bronchodilator: Dilates the bronchi and bronchioles, thereby increasing airflow to the lungs.

Cardiotonic: A tonic herb that has a beneficial effect on the heart and blood vessels.

Carminative: Aids the release of gas from the intestines and reduces the production of gas.

Cathartic: Stimulates the movement of the bowels; is more powerful than a laxative.

Cholagogue: Stimulates the flow of bile from the liver (via the gallbladder). Sometimes synonymous with *choleretic.*

Decongestant: Helps relieve nasal congestion and inflammation.

Demulcent: A mucilaginous (slimy) herb that soothes and protects irritated mucous membranes.

Diaphoretic: Stimulates perspiration through peripheral vasodilation or stimulation of the sweat glands.

Diuretic: Increases the secretion and elimination of urine from the body.

Emetic: Induces vomiting.

Emmenagogue: Helps bring on menses.

Emollient: Softens and soothes external tissue.

Expectorant: Aids in the removal of mucus (along with trapped debris and pathogens) from the lungs. Relaxing expectorants are used for dry, hot spasmodic coughing, whereas stimulating expectorants are beneficial in helping to remove thick, damp, productive coughs.

Galactagogue: Encourages the production and secretion of breast milk.

Hemostatic: Helps reduce or stop bleeding.

Hepatic: Supports general liver function.

Hormone balancer: Aids in balancing reproductive hormones.

Hypnotic: Inducing or sustaining deep sleep.

Hypoglycemic: Lowers blood sugar levels.

Hypotensive: Lowers blood pressure.

Immune tonic: An herb that has traditionally been used over longer periods of time to support and bolster the immune system.

Immunomodulator: Regulates and balances the immune system.

Immunostimulant: An herb that is typically used in short-term infections to stimulate the immune system.

Laxative: Stimulates or facilitates peristalsis (the movement of the bowels) and fecal elimination.

Lymphagogue: Moves lymph fluid through the lymphatic system.

Nervine: An herb that has a positive effect on the nervous system.

Parturient: Supports childbirth.

Partus preparator: Helps prepare a woman's body for labor.

Phytoestrogen: Compounds, produced by plants, with an ability to bind to estrogen receptor sites in the body, and subsequently elicit an estrogen-like effect.

Purgative: Stimulates the movement of the bowels.

Rubefacient: Enhances blood flow to an area when applied topically.

Sialagogue: Promotes saliva production.

Stimulants: Herbs that work to enliven the body's physiological processes.

Styptic: An herb that helps to reduce or stop external bleeding.

Vasodilator: Dilates the blood vessels.

Vermifuge: Expels parasites from the body. *Also known as anthelmintic.*

Vulnerary: Helps heal tissue, both when applied topically or taken internally.

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